Chapter One

COST-SAVING TECHNOLOGIES AND THE HOME PROGRAM

This model is designed for use by any participating jurisdiction (PJ) in the HOME Program that is undertaking hard construction activity in single-family housing (one- to four-dwelling units) or low-rise multifamily units, supported in whole or in part by HOME funds. The model applies whether the HOME funding supports major or minor rehabilitation or new construction.

The only HOME-funded activities not covered by this model are projects that do not involve hard construction, such as programs focused exclusively on providing financing assistance to homebuyers or renters.

The model was designed to suggest methods that PJs can use to reduce the costs of rehabilitating existing housing units or to construct new units in the HOME program to increase the supply of affordable housing.

HOW TO USE THIS MODEL

An extensive list of cost-saving options that can be applied to one or more types of construction work, plus detailed information about some of the more important entries on the list is provided in this model. PJs should screen the list for ideas that can be applied to their local projects. The list can then be used by the PJ to develop specifications for work to be performed.

Copies of the model program should also be provided to local contracting firms that are developing detailed plans and specifications for any type of housing construction work, or are submitting bids on projects defined in general terms. Contractors should be encouraged to review the document and draw on as many ideas as possible to help minimize their costs. Sources for additional information are identified in the bibliography. In addition, a list of helpful organizations that can be consulted to resolve questions or uncertainties about the implications of particular suggestions is provided in the Appendix.

Regardless of who uses this model, the ultimate goal is the same—to take maximum advantage of opportunities to provide new or rehabilitated housing at the lowest cost consistent with health, safety, and good construction practices.

User feedback on the content and overall utility of this model is invited, and additional cost-saving suggestions are also welcome. The Office of Affordable Housing Programs will accept both.

RELATIONSHIP TO OTHER HOME MODELS

The cost-saving suggestions in this model are designed for use in conjunction with other HOME model programs, as well as similar projects undertaken by a PJ using HOME funds. HOME model programs that are suitable for use with this model include:

- From Rental Rehabilitation to the HOME Program;
- Owner-Occupied Rehabilitation;
- HOME Repair/Modification Programs for Elderly Homeowners;
- Multifamily Homeownership and the HOME Program; and
- Energy Conservation and Housing Rehabilitation Under the HOME Program.

The technical suggestions detailed in this model are potentially relevant to any project activity that involves physical construction, alteration, renovation, rehabilitation, or repair of housing, especially single-family and low-rise multifamily housing.

POTENTIAL CONCERNS IN THE USE OF THIS MODEL PROGRAM

Although the cost-saving suggestions in this model are supported by research and practical experience, they may not be appropriate in all situations. Local code requirements, lack of knowledge or experience on the part of the building trades, or perceived consumer resistance to nontraditional construction practices may limit the use of cost-saving alternatives in some projects. PJs may need to address these issues to realize the greatest cost savings from these opportunities.

Historically, code requirements have sometimes been viewed as a limiting factor in implementing innovative cost-saving practices. In recent years, however, significant progress has been made in updating major model codes and promoting consistency across the Nation. HOME Program regulations do not relax applicable regulatory requirements. Rather, in terms of general property standards, they require that:

- All projects assisted under HOME meet, at a minimum, the HUD Section 8 Housing Quality Standards (HQS) found in 24 CFR Section 882.109; and
- All new construction and substantial rehabilitation funded by HOME meet all applicable Federal, State, and local codes, rehabilitation standards, ordinances, and zoning ordinances.

HOME legislation and regulations also deal specifically with energy conservation features in assisted housing and require that:

- Newly constructed, HOME-funded housing meet the current edition of the CABO *Model Energy Code* that applies to housing insured by the Federal Housing Administration (FHA); and
- Housing that has been substantially rehabilitated with HOME funds meet the HUD Cost-Effective Energy Conservation and Effectiveness Standard (CEECS) found in 24 CFR Part 39.

Local rules determine when rehabilitation triggers the need to bring an entire structure up to current code requirements (which is typically a very costly undertaking). Rehabilitation standards are far more streamlined than code requirements for new construction. Thus, avoiding the need to bring an entire building up to new construction codes can result in major cost savings because building systems that are still functional may not need to be replaced. Ensuring that local standards for rehabilitation do not go significantly beyond the performance-oriented requirements of HUD HQS can also help keep costs under control.

Where the applicable code requirements contradict or do not specifically permit particular cost-saving suggestions, it may be possible to work with the local building department to secure waivers, variances, or determinations of "equivalency" that would permit their use. Reference to model code provisions that allow the item in question (even in codes that do not apply in the jurisdiction), as well as underlying research reports, may help to gain the support and approval of local building officials.

A second concern regarding the use of the cost-saving ideas presented in this model can result from lack of information on the part of the builders and subcontractors responsible for performing the work. Uncertainty about ultimate performance can be a serious deterrent to change. This concern applies primarily to the technically complex suggestions (e.g., frost-protected shallow foundations). In contrast, most of the suggestions presented in this model do not involve unfamiliar construction practices. They save money by simplifying the process. Where inadequate information or training is a problem, the logical solution is to provide easy access to materials that explain innovative construction methods in detail. This model gives the user references and citations to such materials, as appropriate.

The response of consumers is a third potential concern to the adoption and use of cost-saving practices such as those described in this model, particularly those that result in visible changes to the building. Successful experience with these practices has shown that consumer acceptance is not a serious obstacle as long as functional needs and expectations are met. Because the HOME Program focuses on increasing opportunities for homeownership and rental housing among low-income households, it is unlikely that marketing houses or apartments built or rehabilitated with HOME funding will be a problem. Most consum-

ers are delighted to have access to homes or apartments they can afford, rather than remaining in unsafe or dilapidated living conditions.